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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/728,717	11/30/2000	Kai Ahrens	P-4606	4846

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EXAMINER

MENBERU, BENIYAM

ART UNIT	PAPER NUMBER
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2626

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/728,717

Applicant(s)

AHRENS, KAI

Examiner

Beniyam Menberu

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: ACT 101

Response to Arguments

1. Applicant's arguments filed December 28, 2004 have been fully considered but they are not persuasive. Regarding the rejection of claims 1, 7, and 13 under U.S. Patent No. 6377354 to Nguyen et al in view of U.S. Patent No. 5959867 to Speciner et al, Nguyen et al does not explicitly disclose a list for transparent graphic objects and grouping according to transparency of object. The graphic objects as disclosed by Nguyen et al are grouped by transparency as evident in Figure 4 where the bitmap image 168 does not obscure the text object 174 and 176 thus implying that object 168 is a transparent object. Further in Figure 3B, step 142, wherein text objects are drawn together with graphic objects, Nguyen et al teaches that when text and graphic objects overlap they are drawn as union (column 7, lines 4-15) and further Nguyen et al teaches that overlapping objects are drawn transparently thus implying that the graphic objects are transparent (column 7, lines 56-61). Regarding the formation of list of transparent object, Nguyen et al discloses a bitmap buffer (Figure 3A, reference 138), wherein all the graphic objects and text objects which overlap graphic objects which are transparent are stored in (column 7, lines 4-10, lines 20-24). Thus the bitmap buffer acts as a list of transparent objects by storing all the transparent objects and texts which overlap transparent objects. Further since Nguyen et al stores the location of graphic objects and text objects which overlap graphic objects transparently in memory, there is a listing in memory of all such objects which reads on creating a transparency list (Figure 3A, reference 144, reference 152).

Regarding the rejection of claims 6, 12, and 18 under U.S. Patent No. 6377354 to Nguyen et al in view of U.S. Patent No. 5959867 to Speciner et al further in view of U.S. Patent No. 5335316 to Toyokura, Toyokura discloses the division of frames which defines what a subframe is even in the case of graphic objects (column 2, lines 60-68).

Specification

2. The disclosure is objected to because of the following informalities:

In the first Amendment to the Specification on page 2, line 1, the text "Method 230 analyzes document 235, which is this" should be "Method 230 analyzes document 235, which in this"

Appropriate correction is required.

Claim Objections

3. Claim 20 is objected to because of the following informalities: Claim 20 depends on claim 20 instead of depending on claim 19. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2626

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 19 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6377354 to Nguyen et al.

Regarding claim 19, Nguyen et al disclose a method for processing a document page containing transparent graphics objects for printing, said method comprising: determining whether at least a part of a non-transparent object including a plurality of text words (Nguyen et al disclose text objects 160, 162, 164 in Figure 4 consisting of plurality of words which are not considered for overlapping compared to single word objects 174 and 176 which overlap bitmap 166. Thus the text objects can include plurality of words (column 8, lines 1-10).) overlaps a transparent graphics object contained in a transparency list (Per the discussion above for claims 1, 7, and 13, the transparency list is represented by combination of Bitmap location information and Bitmap buffer shown in Figure 3A as reference 118 and 138 (column 7, lines 4-8)); and adding said entire non-transparent object to said transparency list when either of (a) all of said non-transparent object overlaps said transparent graphics object; and (b) only said at least a part of said non-transparent object overlaps said transparent graphics object is true (The overlapping text which reads on non-transparent object which overlaps graphic image is drawn into bitmap buffer and bitmap location information as shown in Figure 3B, reference 142, 144 as a result of "Yes" in block 122. By definition overlap means partial or full intersection of two objects.).

Regarding claim 20, Nguyen et al disclose the method of Claim 20 further comprising: creating said transparency list containing said transparent graphics object prior to said determining operation (In the flow chart of Nguyen et al, print objects are received in block 114 in Figure 3A. Nguyen et al teaches that when text objects, which represent non-transparent objects, are received they are compared with existing bitmap location information which reads on transparency listing. Thus the determination of non-transparent objects can come after the transparent objects are known and listed (column 7, lines 4-9).).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 13, 14, 15, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6377354 to Nguyen et al in view of U.S. Patent No. 5959867 to Speciner et al.

Regarding claims 1, 7, and 13 Nguyen et al disclose a system comprising of a memory and processor (column 4, lines 40-44; Figure 1, reference 22, 21), program and method for converting only objects contained in said transparency list into bitmaps for printing (Nguyen et al disclose a system wherein transparent graphic objects (column 7, lines 58-61; Figure 4) and non-supported text objects (Figure 3A, reference 124, 136)

Art Unit: 2626

are placed in a bitmap buffer for printing (Figure 3A, reference 138) while other objects are placed in output buffer (Figure 3A, reference 126).).

Nguyen et al does not disclose a system, a program and method for creating a transparency list containing the transparent graphics objects of said document page.

Speciner et al disclose a system, wherein objects to be printed are placed on a display list before processing depending on conditions of the object (column 2, lines 28-37).

Nguyen et al and Speciner et al are combinable because they are in the same problem area of printing graphics.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine listing method of Speciner et al to create a transparency list for the graphics objects in the system of Nguyen et al to implement a document printing system according to the teaching of Nguyen et al.

The motivation to combine the reference is clear because transparent graphics object and other types of non-text objects may need different processing so it is convenient to have a method of separating objects using a list.

Regarding claims 2, 8, and 14, Nguyen et al in view of Speciner et al teach all the limitations of claims 1, 7, and 13 respectively. Further, Nguyen et al teaches a method, system, and program for generating a bitmap frame for at least one object in said transparency list wherein an area of said bitmap frame is less than an area of the entire document page (In Figure 4, Nguyen et al show a document that contains

transparent graphic objects and texts wherein the frame bounded by reference 168 (column 8, lines 3-6) is smaller than the entire document area.).

Regarding claims 3, 9, and 15, Nguyen et al in view of Speciner et al teach all the limitations of claims 1, 7, and 13 respectively. Further, Nguyen et al in view of Speciner et al teach system, method, and program for processing portions of the document page that do not include objects in said transparency list as non-bitmapped data (The system of Nguyen et al process non-graphics objects by sending them to the output buffer instead of the bitmap buffer (Figure 3A, reference 128,126) with the exception of unsupported text objects which are bitmapped (Figure 3A, reference 136)).

Regarding claims 4, 10, and 16, Nguyen et al in view of Speciner et al teach all the limitations of claims 1, 7, and 13 respectively. Further, Nguyen et al teach system, method, and program of examining a non-transparent object of said document page for overlap with at least one transparent graphics object contained in said transparency list (Figure 3A, reference 122; column 6, lines 38-43; column 7, lines 4-6. The transparency list is maintained in the form of the bitmap buffer (column 7, lines 7-8).); and inserting said non-transparent object into said transparency list upon said non-transparent object overlapping with at least one transparent graphics object contained in said transparency list (Nguyen et al teaches that non-graphic objects are inserted into the bitmap buffer (column 7, lines 4-8)).

Regarding claims 5, 11, and 17, Nguyen et al in view of Speciner et al teach all the limitations of claims 1, 7, and 13 respectively. Further, Nguyen et al teach system, method, and program for generating a frame for each overlapping compound

Art Unit: 2626

object in said transparency list, an overlapping compound object being formed by a transparent graphics object and non-transparent objects overlapping said transparent graphics object (Nguyen et al show an overlapping text object (Figure 4, reference 170) with transparent graphic (Figure 4, reference 166) wherein a frame is shown for the combined overlapped object (Figure 4, reference 180)), said frame defining an area to be printed as a bitmap in printing the overlapping compound object (column 8, lines 13-19).

8. Claims 6, 12, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6377354 to Nguyen et al in view of U.S. Patent No. 5959867 to Speciner et al further in view of U.S. Patent No. 5335316 to Toyokura.

Regarding claims 6, 12, and 18, Nguyen et al in view of Speciner et al teach all the limitations of claims 5, 11, and 17 respectively. However, Nguyen et al in view of Speciner et al does not teach generating said frame for each overlapping compound object as a composition of subframes.

Toyokura discloses an apparatus, method, and program (column 2, lines 25-30) for generating said frame for each overlapping compound object as a composition of subframes (column 2, lines 45-50, lines 61-68).

Nguyen et al in view of Speciner et al and Toyokura are combinable because they are in the same problem area of printing documents.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the method of subframes taught by Toyokura to the output of

Art Unit: 2626

the combined system of Nguyen et al in view of Speciner et al to generate bitmap of smaller frame size.

The motivation to combine the reference is clear because generating smaller frames can reduce memory usage as mentioned by Toyokura (column 1, lines 59-68, column 2, lines 1-2).

Other Prior Art Cited

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6507413 to Mueller et al disclose method for image display.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beniyam Menberu whose telephone number is (571) 272-7465. The examiner can normally be reached on 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached on (571) 272-7471. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service office whose telephone number is (571) 272-2600. The group receptionist number for TC 2600 is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Art Unit: 2626

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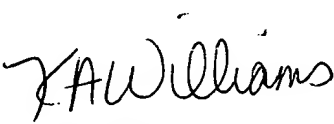
Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner

Beniyam Menberu

BM

05/23/2005


KIMBERLY A. WILLIAMS
SUPERVISORY PATENT EXAMINER